

GENERAL SPECIFICATION

FOR

MARKING, PACKING, PRESERVATION AND ASSEMBLING

MARKING.

All the pieces produced by the Manufacturer report on the rim of the flanges the following information as standard condition:

DN, PN, lining material (PTFE), Manufacturer's stamp (LMP), month/year of fabrication.

In addition to the above mentioned data, there are also stamped the following numbers:

- length, expressed in mm, stamped only on the rim of the flanges for pipes;
- progressive number, stamped on the rim of the flanges for all the items (excluding spacers), which is an identification number to trace out all the specific information typical of the marked part.

PACKING.

All the items have a wooden protection cap on the ptfе sealing surface in order to avoid cuts and damages to the ptfе flare: **the wooden protection caps must be removed just before assembling.**

Manufacturer guarantees that the packing is suitable for the means of transportation and, specifically, the following systems are utilized:

- **PALLET:** for pipes of small lengths, fittings, bolting material and accessories (suitable for road transport).

- **RACK OF PIPES:** for long pipes (suitable for road transport).
- **PLASTIC DRUM and/or CARDBOARD BOX:** for small parts (suitable for road transport).

Each package is so made to avoid any damage to the ptfе parts¹.

These points must be fulfilled in order to keep in a good status the contained goods:

- **do not open the package by a sharp part, like as cutters, knives, screwdrivers.....**in order to avoid damages and cuts to the ptfе flares;
- **keep the packages well closed up to the assembling:** this guarantees a good preservation of the pieces for a period of at least one year;
- **do not drop or turn upside down the packages:** the ptfе parts are quite delicate and they can be damaged in case that they are not handled in the proper manner;
- **take the different items out of the packages with caution,** avoiding mechanical damaging of the ptfе surfaces.

WARNING.

The packages must be left under a shelter², in order to avoid direct contact to the sun or to warm weather conditions.

The packages are suitable to be stored for a period of at least one year, if they are kept in the proper status.

Open the packages just before assembling, so that moisture and eventual not correct handlings should be avoided.

Do not damage the packages during the unloading operations and during inside transportations by lift forks.

Do not remove the wooden protection caps until assembling.

Do not leave the pieces without protection caps under the sun.

No other specific cautions should be taken into account for the nature of the components.

¹ unless it is loaded, transported, unloaded and handled not in the proper way.

² even in the open air.

ASSEMBLING.

The steel parts should be not welded or brazed, in order to avoid damages to the ptfе liner.

Remove the plastic labels just before assembling.

Clean with a smooth cloth the ptfе surface before mounting: eventual impurities should be removed in order to avoid damages especially on the ptfе flares.

Do not use sharp edges to mount the items: a cut on the ptfе flare does not permit to utilize that item anymore.

Assembling of the single elements does not require further sealing, but a ptfе gasket should be used in case of connections with harder surfaces than ptfе (enamel, glass, steel or even other plastic materials).

Tighten always the bolting into a cross-section: an excessive traction during flange screwing may cause permanent deformations on the ptfе flares.

The following twisting moments can be used as general criteria for assembly:

DN (PN 10 – 16)	NUMBER OF SCREWS AND THREADS	TWISTING MOMENT [Nm]
15	4 X M12	15
20	4 X M12	22
25	4 X M12	22
32	4 X M16	25
40	4 X M16	25
50	4 X M16	35
65	4 X M16	45
80	8 X M16	45
100	8 X M16	50
125	8 X M16	60
150	8 X M20	70
200	8 X M20	100
250	12 X M20	100
300	12 X M20	120
350	16 X M20	120
400	16 X M22	120
450	20 X M22	150
500	20 X M22	150
600	20 X M27	150
Bigger DN	==	200

These specifications are referred to maximal temperatures and screws with lubricated threads easy to insert.

About 24 hours after the screwing is operative, once the final temperature has been reached, the screwing should be checked in relation to the twisting moment. At room temperature the values concerning the twisting moment can be exceeded up to 50%.

The whole piping is provided with vent holes: it is important not to obstruct those holes on the metallic frames when insulation or no-corrosive measures are taken.

When the temperature exceeds 50°C, the piping should not be dismantled, in order to avoid damaging to the seal surfaces.

In case of leakages in the connections of the flanges, the screws should not be tightened; on the contrary, the connection should be loosened in order to allow inspection for alien bodies or unevenness.

SAFETY.



The Producer (L.M.P. Fluorcarbon s.r.l.) is not supplying safety valves or alternative systems to avoid any excessive pressure inside the delivered material, which could cause serious damages to people and/or plants and/or part of the same: the operation for granting a safety condition of the items will be on User's account.

Moreover, the items supplied by the Producer (L.M.P. Fluorcarbon s.r.l.) are studied to be used with presence of high temperature (up to 200°C), even if they are not protected outside because of the very particular nature of the material and of the protective barriers available on the market, which are suitable to be used with pipes and fittings in steel with inside lining in ptfе.

The final User will provide to insulate the items according to its own necessities and choices.

Finally, the steel frames with ptfе lining inside are studied for the passage of dangerous, corrosive and toxic fluids, in any case, substances that in case they come out from the piping line, could cause serious damages to people, animals, things and environment: the final User must utilize all the available and possible means in order to avoid any accident, paying particular attention to the protection, maintenance and right use of the delivered items.

The Producer (L.M.P. Fluorcarbon s.r.l.) cannot be considered responsible for any damages to people, animals, things and environment, caused by the User with an improper use, or without the respect of the working conditions communicated, or even for the lack of application of the Law disposals and of any applicable regulation.